Barney et al. teaches a solid culture medium for detection of beer spoilage microorganisms (see title of the patent). The method by which Barney et al. achieves its objective is to plate beer samples on a sold culture medium, which has a pH of between 5.5-5.7, incubate the plates, and then detect colonies of beer spoilage microorganisms. Barney et al., Column 2, lines 18-34. The only detection mechanism that Barney et al. teaches is a visual detection of colonies and determination of their size in millimeters. Barney et al., Table II and Table III, and related text. The culture medium of Barney et al. has a buffer system for a single narrow pH range of between 5.5-5.7. Barney et al., Column 2, line 21; Table I, last row; and Column 7, lines 34-38. Furthermore, the culture medium of Barney et al. comprises agar, which renders it solid. Barney et al. Column 1, lines 61-63; Column 2, lines 18-21; Table I, 5th row from the bottom; and table at the end of Column 7 and beginning of Column 8, 3rd row from the bottom. In addition, Barney et al. compares its culture medium with the standard culture media in beer manufacturing, all of which are solid media. Barney et al., Column 2, line 65, to Column 3, line 56.

Applicants respectfully traverse the Examiner's rejections. First, the culture medium of the present invention comprises "a nutrient broth," which by definition is a liquid and not a solid. Solid culture media are primarily used for determining the number of colonies that can grow from these bacteria and identifying the type of bacteria in sample. Liquid culture media, on the other hand, are used in determining if any bacteria are present in a sample. The actual number of bacteria present in the sample cannot be determined using liquid culture media. It is well known in the art that solid and liquid culture media are used for different purposes and that a solid medium cannot be used for a purpose that requires a liquid medium, and vice versa. Those of skill in the art reading Barney et al. would be motivated to prepare and use a solid culture medium and not a liquid culture medium. Consequently, Barney et al. teaches away from the present invention, which is directed to a liquid culture medium.

Second, the Examiner has alleged that it would have been obvious for those of skill in the art to combine a pH indicator with the culture medium taught by Barney et al. Applicants respectfully disagree. The Examiner has provided no motivation or suggestion either in Barney et al. or in the general knowledge of those skill in the art to combine a pH indicator with a solid culture medium when the only means of detection relevant to the culture medium is counting the colonies of bacteria and determining their size, i.e., the method taught by Barney et al.

Third, the culture medium of Barney et al. comprises a buffer system that keeps the pH of the medium within a single narrow range of between 5.5-5.7. The culture medium of the present invention has a buffer system that allows the pH to change "from a first pH range to a second pH range." In addition, the culture medium of the present invention comprises "a dual buffer system comprising a first buffer having a first pK_a and a second buffer having a second pK_a, wherein said first pK_a and said second pK_a are within said first pH range and said second pH range respectively," for example, from about pH 7.0 to about pH 4.0-5.0. See, for example, the specification, page 6, line 11, to page 7, line 3. Barney et al. comprises a single buffer system giving rise to a single pH range. There is no motivation or suggestion in Barney et al. to formulate a culture medium having a dual buffer system.

Therefore, in view of the above, Applicants respectfully maintain that the claims of the present invention are not obvious over the cited prior art, and therefore, are patentable. Applicants respectfully request that the Examiner reconsider and withdraw the rejection.